

14. (Once amended) The apparatus of claim 13, wherein said injector reel is moveable from a first stored position to a second operative position, and said pressure is exerted over more than 90° of said injector reel when said injector reel is in said second operative position and said coiled tubing is directed between said hold down assembly and said circumference of said injector reel to provide positive engagement of said tubing by said injector reel when said injector reel is rotated to pull said tubing off of said tubing storage spool or return said tubing to said tubing storage spool.

16. (Once amended) The apparatus of claim 4, wherein said injector reel is moveable from a first stored position to a second operative position, and said second position positions said injector reel above said first end of said frame, and said coiled tubing exits said apparatus at an angle less than 90° to said surface.

17. (Once amended) The apparatus of claim 4, further comprising a mast pivotally mounted on said frame, wherein said injector reel is rotatably [interconnected] mounted to the frame via the mast.

19. (Once amended) The apparatus of claim [4] 17, wherein said injector reel is moveable from a first stored position to a second operative position.

20. (Once Amended) The apparatus of claim 4, wherein each [support] bullnose arm having a bullnose assembly for engagement with said storage spool.

Complete listing of Claims

For the benefit of the Examiner below is a complete listing of claims as currently amended.

4. (Presently amended) An apparatus for injecting coiled tubing into a hole in the earth's surface comprising:

a frame having a front end and a back end;

opposed bullnose arms mounted to said frame,

a tubing storage spool removably mounted to said bullnose arms, said tubing storage spool having said coiled tubing stored thereon;

an injector reel rotatably mounted to said frame; and

a drive mechanism attached to said injector reel to rotate said injector reel;

wherein said bullnose arms are vertically adjustable to accept varying tubing storage spool diameters.

5. (Previously amended) The apparatus of claim 4 further comprising a first tubing stabilizer assembly mounted within said frame and a second tubing stabilizer mounted above said hole in said surface.

9. (Previously amended) The apparatus of claim 4 wherein said drive mechanism is of adjustable length to accommodate a range of storage spool diameters.

11. (Previously amended) A method of retrieving a length of coiled tubing from beneath a surface and storing said tubing on a tubing storage spool comprising:

rotating a reel for receiving said coiled tubing at an angle less than 90° to said surface;

exerting pressure against more than 90° of the circumference of said reel while running said tubing around a portion of said circumference to exert pressure against said tubing to cause positive engagement of said tubing by said reel; and

routing said tubing off of said reel onto said tubing storage spool, said tubing storage spool mounted on a cradle vertically and horizontally adjustable to accept varying spool widths and diameters.

12. (Previously amended) The apparatus of claim 4, wherein said bullnose arms are horizontally adjustable to accept varying spool widths.

13. (Previously presented) The apparatus of claim 4, further comprising a hold down assembly mounted around a portion of the circumference of said injector reel for exerting a pressure against said coiled tubing.

14. (Previously amended) The apparatus of claim 13, wherein said injector reel is moveable from a first stored position to a second operative position, and said pressure is

exerted over more than 90° of said injector reel when said injector reel is in said second operative position and said coiled tubing is directed between said hold down assembly and said circumference of said injector reel to provide positive engagement of said tubing by said injector reel when said injector reel is rotated to pull said tubing off of said tubing storage spool or return said tubing to said tubing storage spool.

15. (Previously presented) The apparatus of claim 13, wherein said hold down assembly comprises:

multiple spindle brackets, said brackets having a spindle connected to said spindle bracket; a roller rotatably connected to said spindle, the roller having a groove; and a tension adjuster for adjusting the tension of the roller against said coiled tubing.

16. (Presently amended) The apparatus of claim 4, wherein said injector reel is moveable from a first stored position to a second operative position, and said second position positions said injector reel above said first end of said frame, and said coiled tubing exits said apparatus at an angle less than 90° to said surface.

17. (Presently amended) The apparatus of claim 4, further comprising a mast pivotally mounted on said frame, wherein said injector reel is rotatably mounted to the frame via the mast.

18. (Previously presented) The apparatus of claim 4, further comprising a mast pivotally mounted on said frame, wherein said frame is pivotally moveable in a vertical direction.

19. (Once amended) The apparatus of claim [4] 17, wherein said injector reel is moveable from a first stored position to a second operative position.

20. (Presently amended) The apparatus of claim 4, wherein each bullnose arm having a bullnose assembly for engagement with said storage spool.

21. (Previously presented) The apparatus of claim 4, wherein said injector reel is moveable from a first stored position to a second operative position.

22. (Previously presented) The apparatus of claim 4, further comprising a tubing straightener mechanism attached to said injector reel.

23. (Previously presented) The apparatus of claim 4, wherein the drive mechanism comprises:

a hydraulic motor; and
a spool drive socket interconnected to said hydraulic motor via a chain drive or belt.

24. (Previously presented) The apparatus of claim 23, wherein the drive mechanism further comprises an adjustable idler to vary the length of the drive mechanism to accommodate various diameter spools.

25. (Previously presented) The method of claim 11, wherein the pressure against said tubing is performed by varying the pressure of one or more rollers of a hold down assembly against said coiled tubing.

Status of claims and support for claim changes

Claim 1 was previously canceled.

Claim 2 was previously canceled.

Claim 3 was previously canceled.

Claim 4 is pending and has been amended. Support for the amendment may be found in Figs. 1-4 and Figs. 9-15. See also, the specification page 2, line 18-page 3, line 8. See also, page 9 lines 1-6.

Claim 5 is pending and was previously amended.

Claim 6 was previously canceled.

Claim 7 was previously canceled.

Claim 8 was previously canceled.

Claim 9 is pending and was previously amended.

Claim 10 was previously canceled.

Claim 11 is pending and was previously amended.

Claims 12-25 are pending and were previously added. Claims 12, 16, 17 and 20 are presently amended. Support for the amendment may be found in Figs. 1-4 and Figs. 9-15. See also, the specification page 2, line 18-page 3, line 8. See also, page 9 lines 1-6.